MONITORING AND REPORTING PROGRAM NO. R3-2004-0066

for

DISCHARGES ENROLLED UNDER GENERAL WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES OF FRUIT AND VEGETABLE PROCESSING WASTE CENTRAL COAST REGION

Dischargers regulated under the General WDRs for Discharges of Fruit and Vegetable Processing Waste are subject to the following monitoring and reporting requirements, unless such requirements are modified or waived by the Executive Officer. Additional requirements may be added by the Executive Officer, as needed to adequately ensure compliance with the General WDRs.

WATER SUPPLY MONITORING

Representative samples of the Facility's water supply shall be collected and analyzed as follows:

Constituent	Units	Sample Type	Minimum Frequency of Sampling and Analysis
Total Dissolved Solids	mg/L	Grab	Annually (March)
Chloride	mg/L	Grab	"
Sodium	mg/L	Grab	"
Boron	mg/L	Grab	"
Sulfate	mg/L	Grab	"
Nitrate (as N)	mg/L	Grab	"

PRODUCTION MONITORING

Facility production shall be reported as follows:

Parameter	Units	Sample Type	Reporting Frequency
Start and End of Processing Season	Dates	--	Annually (December)
Fruits and Vegetables Processed	Tons/year	Measured	"

CHEMICAL USAGE MONITORING

A summary of volumes and types of any chemicals used at the Facility shall be included with each monitoring report.

INFLUENT MONITORING

Representative samples of influent to the treatment system shall be collected and analyzed as follows:

Constituent	Units	Sample Type	Minimum Frequency of Sampling and Analysis		
			Peak Wastewater Flow **<50,000 gpd**	Peak Wastewater Flow **50,000-500,000 gpd**	Peak Wastewater Flow **>500,000 gpd**
Flow	gpd	Metered	Daily	Daily	Daily
Peak Daily Flow	gpd	Calculated	Monthly	Monthly	Monthly
Avg. Daily Flow	gpd	Calculated	Monthly	Monthly	Monthly
pH	pH units	Grab	Monthly	Weekly	Daily
Biochemical Oxygen Demand (BOD_5)[1]	mg/L	Composite[2]	Annually[3]	Semiannually[4]	Quarterly[5]
Nitrite (as N)[1]	mg/L	Composite	"	"	"
Nitrate (as N)[1]	mg/L	Composite	"	"	"
Total Kjeldahl Nitrogen (as N)[1]	mg/L	Composite	"	"	"
Total Nitrogen[1]	mg/L	Composite	"	"	"

Notes:

1. Influent sampling for BOD_5, nitrite, nitrate, TKN, and total nitrogen may not be required for facilities with low organic and nutrient load wastewater. The Discharger must submit sufficient documentation to support the removal of influent monitoring for BOD_5, nitrite, nitrate, TKN, and total nitrogen in its NOI; if documentation is not sufficient, the discharger may request removal of monitoring after one year of full compliance and monitoring reports support removal.
2. Composite samples will cover discharge through one day of operation. Facilities with peak wastewater flow less than 50,000 gpd may utilize grab samples rather than composite samples.
3. Annual influent monitoring shall occur in June.
4. Semiannual influent monitoring shall occur in March and September.
5. Quarterly influent monitoring shall occur in March, June, September, and December.

POND MONITORING

Representative samples of wastewater contained in each pond shall be collected and analyzed as follows:

Constituent	Units	Sample Type	Minimum Frequency of Sampling and Analysis		
			Peak Wastewater Flow **<50,000 gpd**	Peak Wastewater Flow **50,000-500,000 gpd**	Peak Wastewater Flow **>500,000 gpd**
Freeboard	ft	Measured	Monthly	Weekly	Daily
pH	pH units	Grab	"	"	"
Dissolved Oxygen	mg/L	Grab	"	"	"

SEPTIC SYSTEM MONITORING

Solids accumulation in all septic tanks shall be measured annually, prior to the processing season if applicable, and the tanks cleaned when it appears (a) the bottom of the scum (floating) layer will be within 4 inches of the bottom of the outlet device or (b) the sludge level will be within 10 inches of the outlet device before the next scheduled inspection; or submit annual verification of tank cleaning in lieu of measurements. The leachfield areas shall be inspected each week to evaluate adequate system operation and compliance with this Order. Leachfields should be alternated no less than nnually to prevent clogging and surfacing effluent. Notations shall be made in a bound log book and include observations of sludge and scum levels and dates which leachfields are alternated. A summary of the entries made in the log shall be submitted with each monitoring report.

EFFLUENT MONITORING

Representative samples of effluent from the treatment system, immediately prior to disposal, before the treated wastewater is blended with any other water source, shall be collected and analyzed as follows:

Constituent	Units	Sample Type	Minimum Frequency of Sampling and Analysis		
			Peak Wastewater Flow <50,000 gpd	Peak Wastewater Flow 50,000-500,000 gpd	Peak Wastewater Flow >500,000 gpd
Flow	gpd	Metered	Daily	Daily	Daily
Peak Daily Flow	gpd	Calculated	Monthly	Monthly	Monthly
Avg. Daily Flow	gpd	Calculated	Monthly	Monthly	Monthly
pH	pH units	Grab	Monthly	Weekly	Daily
Biochemical Oxygen Demand (BOD_5)[1]	mg/L	Composite[2]	Semianually[3]	Quarterly[4]	Monthly
Total Dissolved Solids	mg/L	Composite	"	"	"
Chloride	mg/L	Composite	"	"	"
Sodium	mg/L	Composite	"	"	"
Boron	mg/L	Composite	"	"	"
Sulfate	mg/L	Composite	"	"	"
Nitrite (as N)[1]	mg/L	Composite	"	"	"
Nitrate (as N)	mg/L	Composite	"	"	"
Total Kjeldahl Nitrogen (as N)[1]	mg/L	Composite	"	"	"
Total Nitrogen[1]	mg/L	Composite	"	"	"
Priority Pollutants (Inorganics)[5]	mg/L	Composite	Annually[6]	Semianually[3]	Quarterly[4]
In addition to the above, facilities which use any form of chlorine for cleaning and/or disinfection shall analyze effluent samples for the following:					
Total Trihalomethanes[7]	mg/L	Composite	Annually[6]	Semianually[3]	Quarterly[4]
Total Haloacetic Acids[8]	mg/L	Composite	"	"	"

Notes:

1. Effluent sampling for BOD_5, nitrite, nitrate, TKN, and total nitrogen may not be required for facilities with low organic and nutrient load wastewater. The Discharger must submit sufficient documentation to support the removal of effluent monitoring for BOD_5, nitrite, nitrate, TKN, and total nitrogen in its NOI; if documentation is not sufficient, the discharger may request removal of monitoring after one year of full compliance and monitoring reports support removal.
2. Composite samples will cover discharge through one day of operation. Facilities with peak wastewater flow less than 50,000 gpd or have effluent discharge from a pond with greater than 10 days detention time may utilize grab samples rather than composite samples.
3. Semiannual effluent monitoring shall occur in March and September.
4. Quarterly effluent monitoring shall occur in March, June, September, and December.
5. Includes the following: antimony, arsenic, beryllium, cadmium, chromium III, chromium IV, copper, cyanide, lead, mercury, nickel, selenium, silver, thallium, zinc.
6. Annual effluent monitoring shall occur in June.
7. Includes the following: chloroform, bromodichloromethane, dibromochloromethane, and bromoform.
8. Includes the following: monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid.

DISPOSAL AREA MONITORING

The Discharger shall inspect and document the condition of fruit and vegetable processing wastewater disposal areas once daily during operation. Subsurface disposal areas should have a regular rotation to prevent clogging and surfacing of effluent. Notations shall be made in a bound log book and include observations of excessive ponding and soil clogging in spreading basins, evidence of erosion, field saturation, runoff, odors, insects, or other potential nuisance conditions that may be present. Any problems shall be promptly corrected. A record shall be kept of the dates and nature of observations and corrective actions taken. A summary of the entries made in the log shall be submitted with each monitoring report. The following information regarding irrigation management at the disposal area shall also be recorded daily and submitted with each monitoring report:

- Inches of precipitation.
- Irrigated areas.
- Daily acreage applied (acres).
- Daily application rate (gal/acre/day)
- Total nitrogen loading rate as a monthly average (lbs/acre/day)
- BOD_5 loading rate as a monthly average (lbs/acre/day)

DISPOSAL AREA SOILS MONITORING

The Discharger shall implement disposal area soils monitoring **if deemed necessary** by the Executive Officer. In general, large facilities that discharge concentrated wastewater that is not adequately neutralized (to between pH 6.5 and 8.4) to soils with poor buffering capacity must perform soils monitoring according to the following instructions. The Discharger shall establish a soil profile monitoring location that is representative of the disposal area. This sampling location shall be provided on a map submitted to the Regional Board for concurrence by the Executive Officer. Samples shall be collected and analyzed for the following constituents:

Constituent	Unit	Method	Sample Depths[2]	Frequency
Soil pH	pH units	1:2 DI Water (soil to solution ratio)	6 inches and 2 ft.	Annually (September)
Total Acidity	meq H^+ / 100 g soil	Measured by $BaCl_2$ – TEA (pH 8.3)[1]	6 inches and 2 ft.	Annually (September)

Notes:
1. See Methods of Soil Analysis (cosponsored by ASTM), American Society of Agronomy, Inc., Madison, WI.
2. Below base of disposal area.

Lime Application – If Soil pH is less than or equal to 6.0, the Discharger shall add lime to neutralize the disposal area soils. The amount of lime required for full neutralization is directly related to Total Acidity. For any representative sample of disposal area soils, multiply the Total Acidity value (meq of H^+/ 100 g soil) by 2000 to get the maximum lime application rate in lbs. pure lime per acre. The amount of lime applied should not exceed the calculated value.

NOTE: Gypsum ($CaSO_4*2H_2O$) applied to increase hydraulic conductivity does not neutralize acidity (gypsum is a neutral salt).

SOLID WASTE DISPOSAL MONITORING

A summary of estimated volumes and disposal locations of screenings, sludge, and solids shall be included with each monitoring report.

GROUNDWATER MONITORING

The Discharger shall implement groundwater monitoring **if deemed necessary** by the Executive Officer. In general, facilities which discharge fruit and vegetable processing waste that is not adequately treated (biologically stabilized and neutralized) to unlined ponds, leach fields, or spreading basins, or in areas where depth to groundwater is shallow, may be required to perform regular groundwater monitoring. Groundwater samples shall be collected from at least three representative monitoring wells, one upgradient and two downgradient of the disposal area, and analyzed as follows:

Constituent	Units	Sample Type	Minimum Frequency of Sampling and Analysis
Depth to groundwater	Feet	Measured	Quarterly (March, June, September, and December)
pH	pH units	Grab	Quarterly (March, June, September, and December)
Total Dissolved Solids	mg/L	Grab	Quarterly (March, June, September, and December)
Chloride	mg/L	Grab	Quarterly (March, June, September, and December)
Sodium	mg/L	Grab	Quarterly (March, June, September, and December)
Boron	mg/L	Grab	Quarterly (March, June, September, and December)
Sulfate	mg/L	Grab	Quarterly (March, June, September, and December)
Nitrate (as N)	mg/L	Grab	Quarterly (March, June, September, and December)

SAMPLING AND ANALYSIS PROVISIONS

1. All sampling, sample preservation, and analysis shall be performed in accordance with the latest edition of 40 CFR Part 136 "Guidelines Establishing Test Procedures for the Analysis of Pollutants". The Executive Officer may specify test methods that are more sensitive than those specified in 40 CFR Part 136.

2. Periodic samples shall be taken at regular intervals and be representative of the monitored activity. For example, where quarterly samples are required, samples shall be collected on a representative day of March, June, September, and December of each year.

3. All analytical services shall be conducted at a laboratory certified for such analyses by the State Department of Health, or at a laboratory approved by the Executive Officer.

4. All analytical data shall be reported with method detection limits (MDLs) and with identification of either practical quantitation levels (PQLs) or limits of quantitation (LOQs).

5. All monitoring instruments and devices used by the discharger to fulfill this Monitoring and Reporting Program shall be properly maintained and calibrated, as necessary to ensure their continued accuracy.

REPORTING PROVISIONS

1. Monitoring reports shall be submitted to the Regional Board semiannually, **by January 30th and July 30th of each year**. Monitoring reports shall contain all monitoring data obtained during the previous six months (eg., monitoring reports due July 30th shall include sampling events occurring from January through June). The report shall discuss the compliance record and corrective actions taken, or which may be needed, to bring the discharge into full compliance with the General WDRs. Monitoring reports may be required more frequently as deemed necessary by the Executive Officer, based on review of the NOI and site and facility specific information.

2. Monitoring data shall be arranged in tabular format so that the date, constituents, and concentrations are readily discernible. The data shall be summarized in such a manner to clearly illustrate whether the discharge complies with effluent limitations.

3. The Discharger shall also submit monitoring data and the monitoring reports electronically. Electronic data should be formatted into a Microsoft Excel or equivalent spreadsheet. Electronic report templates are available by contacting Regional Board staff at (805) 549-3147. Electronic submittal should be provided on either 3.5-inch disk or optical compact disk. Electronic data storage media should be labeled with facility name and period of monitoring.

4. If the Discharger monitors any pollutant more frequently than is required by this monitoring program, the results of such monitoring shall be included in the monitoring reports (i.e., quarterly groundwater elevation, etc.).

5. All monitoring reports shall be signed and certified in accordance with Section E.10 and 11 of the General WDRs.

6. The Discharger shall deliver a copy of each monitoring report in the appropriate format to the Central Coast Regional Water Quality Control Board at the following address:

   895 Aerovista Place, Suite 101
   San Luis Obispo, CA 93401

7. The Discharger shall ensure that records of all monitoring information are maintained and accessible for a period of at least five years from the date of the sample. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or by the request of the Executive Officer. Records of monitoring information shall include:

   a. The date, exact place, and time of sampling or measurements;
   b. The individual(s) who performed the sampling, and/or measurements;
   c. The date(s) analyses were performed;
   d. The individual(s) who performed the analyses;
   e. The analytical techniques or methods used;
   f. All sampling and analytical results;
   g. All monitoring equipment calibration and maintenance records.

8. The Discharger shall immediately report any non-compliance potentially endangering public health or the environment to the Regional Board (805/549-3147) and any additional appropriate agency. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written report shall also be submitted to the Executive Officer within five (5) days of the time the Discharger becomes aware of the circumstances. The written report shall contain (1) a description of the non-compliance and its cause; (2) the period of non-compliance, including dates and times, and if the non-compliance has not been corrected, the anticipated time it is expected to continue; and (3) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the non-compliance.

9. The Discharger shall report all instances of non-compliance not reported under Reporting Provision No. 8 at the time monitoring reports are submitted along with the information required in Reporting Provision No.8.

Ordered By _____
Roger W. Briggs
Executive Officer

_____
Date